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GB A 2094602
GB 1584030
GB 1204647
GB 0882951
GB 0769696
GB 0598729
GB 0358020
US 4018003
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(54) **Protecting young trees**

(57) A shelter for improving the growth of young trees consists of a translucent tube open at both ends and tapering from one end towards the other. A base plate of any suitable shape may be attached at approximately a right angle to the broader end of the tube. Both base and tube may be corrugated or otherwise ridged and the top of the tube may have a lip for extra strength. The top of the tube may incorporate an arrangement for the attachment of a supporting stake and the wall may incorporate one or more pockets into which supports may be slotted.

FIG. A.

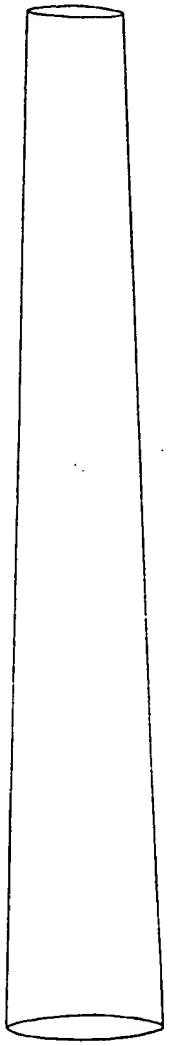

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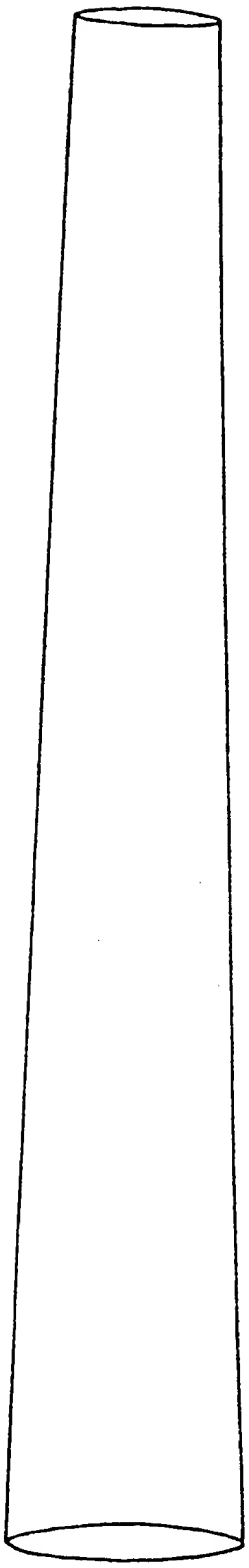
Fig. A.



SPECIFICATION

Individual conical tree shelters

This invention relates to a design of plastic tube which acts as a shelter for improving the growth of young trees, being a tapering tube perhaps attached at its broader end to a base which when laid on the surface of the soil and weighed down with soil or turves anchors the tube over the young tree in an erect position.

For several years the Forestry Commission and others have been experimenting with various designs of individual tree shelter all made from some type of plastic sheet material formed into a tube. The tubes are either constructed on site or if assembled beforehand packed flat for transport. All designs so far produced are attached to some form of supporting stake on site.

This invention has been developed to permit the stacking of one shelter within the next to facilitate storage and transport of a large number of shelters within a small space and to investigate the feasibility of shelters being self-supporting.

According to the invention the shelter consists of a translucent tube open at both ends, of curved cross-section and tapering linearly from one end towards the other; the shelter can be made up of two or more shorter tapering tubes slotted together, but each tube is of one-piece construction and not of a collapsible and re-usable kind; the shelter is unprovided with any means to close off or restrict its top opening.

A base-plate of any suitable shape may be attached at approximately a right angle to the broader end of the tube; both base and tube may be corrugated or otherwise ridged and the top of the tube may have a lip for extra strength; the top of the tube may incorporate an arrangement for the attachment of a supporting stake; the wall may incorporate one or more pockets into which supports may be slotted.

Ideally the shelter would be constructed in one integral piece from a suitable plastic material, such as PVC, by a moulding technique, but other means of construction, including high-frequency welding of sheet material may also be feasible.

In use the shelter is placed over a young tree with one end on the soil surface, so that the tree can grow up the tube and, in due course, out of the top. Soil, turves or other material is placed over the base-plate, if fitted, around the bottom of the shelter to anchor the device to the ground. Ideally the device is self-supporting but a bamboo cane or other suitable stake may be used to support the shelter if required. All shelters being identical and tapering they may be slotted together in a compact stack for storage and transport.

The following drawing is attached:

Fig. A a 3-dimensional drawing of the basic device.

Claims

1. An individual tree shelter consisting of a translucent plastic tube which is open at both ends, which is of curved-form cross-section, which tapers linearly from one end to the other so that several identical such shelters can be telescoped one within another for transport, which is of one-piece construction and not of a collapsible and re-usable kind and which is unprovided with any means to close off or restrict its opening.

2. An individual tree shelter as claimed in claim 1 with a base-plate of any suitable shape attached at approximately a right angle to the broader end of the tube.

3. An individual tree shelter as claimed in claims 1 and 2 with base and or tube corrugated or otherwise ridged for extra strength.

4. An individual tree shelter as claimed in claim 1 with the top of the tube incorporating a lip for extra strength.

5. An individual tree shelter as claimed in claim 1 with the wall or top of the tube incorporating one or more slots or pockets or other arrangement for the attachment of supporting stakes or wires.

6. An individual tree shelter as claimed in claims 1 to 5, but with the shelter being made up of two or more shorter tapering tubes slotted together.

7. An individual tree shelter substantially as described with reference to and as shown in the accompanying drawing.

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